

# MBA program in Cybersecurity and Smart systems

A 1-year MBA program



## **CY Cergy Paris University**

Since the first of January, 2020, Cergy-Pontoise University and EISTI have merged under a new name: CY, Cergy Paris Université. It is composed of 24,000 students. ESSEC is associated with CY as a partner institution.

The academic course offerings are made up of an undergraduate university (CY SUP) and of five undergraduate and graduate schools, four within the university, with the fifth being ESSEC.

In addition to ESSEC, the other graduate schools led by CY university are:

- · CY Tech, specialized in Computer Science, Applied Mathematics, Civil Engineering, Biotechnology & Chemistry, **Economics and Management;**
- CY Arts and Humanities, represented by the National Higher School of Arts Paris-Cergy (ENSAPC), the National Higher School of Architecture of Versailles (ENSAV), the National Higher School of Landscape Design (ENSP) and the National Heritage Institute (INP);
- CY Education, represented by INSPE, EPSS and ILEPS institutions;
- CY Law and Political Sciences, represented by Sciences Po St-Germain-en-Laye campus.

## **CY Tech**

Located in Greater Paris and in Pau, CY Tech is primarily an Engineering Graduate School.

It has earned the "Grande Ecole" status, the highest recognition stated by the French Ministry of Higher Education & Research. CY Tech is also a member of the "Conférence des Grandes Ecoles" (CGE), a French association that gathers elite higher education institutions, which meet strict criteria regarding the recruitment process, educational approach, international and corporate network. Accessible after the completion of a secondary education diploma or through a dedicated post-secondary preparatory class, it delivers a Master's degree in these four fields: Applied Mathematics, Computer Science, Civil Engineering, Biotechnology & Chemistry.

Two university departments have been incorporated into CY Tech: the Institute of Sciences & Techniques (IST) and the Institute of Economics & Management (IEG), which broadens our overall course delivery in these specific areas. CY Tech course offer is structured in the following manner:

- · A five-year Grande Ecole Engineering program;
- · Post-secondary preparatory classes leading to Grande Ecole program enrollment;
- Undergraduate & Graduate Programs;
- Continuous training programs: Specialized Postgraduate Master's;
- International Master's with campuses located out of France;
- PHD programs.



## Our mission, our values

The mission of CY Tech is to meet the rising expectations of both students and industry. Through innovative programs and faculty exchanges, we seek to provide our students with an ever-increasingly attractive educational experience. Students can choose undergraduate and graduate programs in both Engineering and Management disciplines. Students also acquire valuable knowledge and global managerial skills through internships and study abroad experiences with universities worldwide. Since CY Tech's inception, the institution has gradually adapted itself to the evolving economy that offers an extensive and diversified curriculum that meets a contemporary vision of today's world. Its objectives are:



- challenge-driven to prepare students and staff as global citizens and lifelong learners who care and act for the future of the planet and humanity;
- · committed to the principles of openness and inclusion, by building open resources and collaborative platforms, endorsing open science agendas, and sponsoring the access, mobility and inclusivity mechanisms that liberate our intellectual and social potential.

## CY Tech international involvement

CY Tech's international involvement is indisputable and includes work experience abroad, academic exchanges as well as dual degree options. Our institution recently renewed an Erasmus Charter for Higher Education. This recognition demonstrates our expertise in mobility of students & staff and in strong cooperation for innovation and good practices under the Erasmus + policy. CY University is a member of Campus France, the official agency for the promotion of French Higher Education worldwide. CY Tech has also aligned with different European and international organizations and associations (EUTOPIA, EAIE, NAFSA, n+i Network, AIEA, ...) which aim to promote progress of international education. CY owns a Language Centre and is also an ETS TOEIC Authorized Test Centre.

Our university was recently awarded the "Bienvenue en France" label, which distinguishes French Higher Education institutions that have developed reception facilities dedicated to international students. CY is establishing solid links with Chinese universities which will contribute to the creation of a Franco-Chinese Institute to further internationalize its educational opportunities. One of the most remarkable achievements at European level is the recent development of an alliance of six like-minded universities, located in Belgium, Slovenia, Spain, Sweden, the United Kingdom and France, entitled EUTOPIA. The mission of EUTOPIA is to build in the long term a unique and daring alliance of transformative and engaged institutions. The alliance has developed strong ties within the regional communities, the institutional structures and the local companies. EUTOPIA students, researchers and staff work together to build a new academic model, reflecting an open and a united Europe, respectful of the citizens and the environment.

CY Tech diplomas require an official language certification in English as a Foreign Language as part of its national diploma recognition criteria. CY Tech will have signed 250 university partnerships worldwide within the two coming years, including more than 20 international dual degree options. A substantial number of cooperation programs allow the institution to enhance incoming mobility through its undergraduate, graduate and post-graduate English-taught course delivery. In keeping with CY Tech's global vision, our institution plans to open a campus in Singapore within the near future.





## What makes CY Tech different?

One ambitious vision. CY, defined as a university of diversity, society-oriented and of international standing, seeks to educate new generations in the complex challenges of a globalized society in tune with the sustainable development objectives, academic excellence and quality student experience.

A high-profile ranking status. National and international rankings, recognized by many specialized media and websites, show once again that CY course offerings are considered as one of the best in the fields of Engineering, Management, Mathematics & Finance, internationalization and professional integration.

Cutting-edge Research & Technology Transfer activities. Research and technology transfer are at the heart of the dynamics of CY Tech, whose missions contribute to the appropriation of scientific knowledge. CY Tech asserts its vision and pursues an active policy in technology transfer innovation of its research activities, conducted by recognized full-time researchers within its fourteen laboratories and five Open Labs in modeling and experimental sciences.

#### A wide range of facilities offered at the Campus:

- Four libraries with over 2 million publications;
- Four university residences and private housing facilities:
- Student sports facilities with over 30 individual & team activities;
- Four student restaurants, four cafeterias;
- 47 student associations:
- · A full package of cultural activities including a "cultural Pass voucher", a special pass which offers discounts to theaters & cinemas bookings and to other cultural events in Greater Paris.

#### A "Bienvenue en France" label.

This national recognition, awarded by our university, enhances our expertise dedicated to international students, mainly in the following areas:

- Quality and accessibility of information & reception facilities;
- Tutorial support services;
- Housing facilities and campus life development;
- Post-graduate career development and alumni services.

## **Location: Greater Paris**

The Paris Region has much to offer to international students, such as history, art, culture on top of its academic & scientific excellence. It is a unique place to learn, discover, study, engage and exchange, a place where dialogue, fraternity, freedom and creativity will always prevail. Paris has been listed in the QS best student cities ranking for many years. At only 25 minutes from the world famous Les Champs Elysées, or La Défense (one of the major futuristic skyscraper packed, business districts in Europe) stands the city of Cergy-Pontoise. The historic heart of the area of Cergy-Pontoise thrives on a prestigious past which has often found itself at the crossroads of the history of France itself, as when the Royal Court resided there. Its fame was extended through the long residency of Camille PISSARRO, who painted the varied landscapes of the town and its nearby countryside in numerous works, which are now to be found in the greatest museums in the world. Blessed with rich heritage, Cergy-Pontoise became on March 30th, 2006, a member of the national network of towns and lands of Art and History. This label, delivered by the Ministry of Culture and Communication, embodies a policy aiming to promote heritage and architecture. Today, Cergy is known as a vibrant student hub.



# Course program and objectives

#### Program information: an MBA program in Cybersecurity and Smart systems

CY Tech is accredited by "La Conférence des Grandes Ecoles", a French association that gathers elite higher education institutions. The objective of this program is to train future IT managers in the new multidisciplinary engineering professions of IoT (Internet of Things) and communication systems so that after graduation they will be able to:

- Assimilate and master IoT technology;
- Understand the challenges of Smart Systems in France and in the world;
- · Incorporate the acquired knowledge and experience of these challenges in an IT managerial practice, regardless of the environment in which they will be working.

The MBA in Cybersecurity and Smart systems aims to train future IT managers to evaluate, manage and optimize the IT security of an organization as a whole (privacy, reliability, safety, and legal aspects) at the technical (networks, software, data, systems, etc.) as well as the legal and organizational levels.

## Career objectives

- Design of new intrinsically secure systems;
- Protect systems such as the Web, mobile and critical infrastructures;
- Analyze and detect malwares and other cyber-attacks;
- Practice cybersecurity skills in real-life scenarios;
- Information security risk management framework and methodologies;
- · Identify suspicious cyber behavior through data mining and anomaly detection;
- Conduct a court-admissable digital forensics investigation.

The skills developed in this course meet the current needs of software and hardware architects for the entire transmission and data processing chain dedicated to connected and intelligent objects. This training leads to all professions related to networks, security, mobility and Internet of Things, whether at the engineering, architecture, consulting or auditing level: Security Engineer, Architect and Developer of New Technology Applications, Engineer, Research and Development, Project Manager, Auditor, Controller, Assessor, Trainer, Instructor, Expert in Information Systems Security, Security Developer, Security Architect, Expert in Breach Tests, Analyst, Consultant, Crisis Management Specialist, Information Systems Security Manager



Semester 1	////ECTS
UE1: Soft skills Team Building Meeting Facilitation UE2: Smart Connectivity Networks and Protocols Communication Technologies for IoT & Data Analysis	2 1 1 7 4 3
UE3: Smart Data & Processing Distributed Artificial Intelligence Hardware Conception of Processing Modules for the IoT UE 4: Offensive Security & Digital investigation Smart Card Security PenTest(Recognition & Scanning, RedTeam Intrusion) Forensic (Digital investigation) Malware Analysis	4 4 4 13 3 4 3
UE 5 : Cybersecurity Management	9
Crisis Management & Incident Response Cybersecurity Management (Governance & the ISO/IEC 2700x family)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
BlockChain & IAM	3
Total Semester 1	35
Semester 2	
UE 6 : Training period Training period Total Semester 2	<b>25</b> 25 25 25
Total Academic Year	60



# Admission requirements

Interested candidates in the MBA progam in Cybersecurity and Smart systems must have a minimum of:

• 3 years of Higher Education duly completed (180 ECTS) with a minimum of 3 years of professional experience in a middle-management position.

# **Application procedures**

Candidates must submit their application to the following link: https://osc3.tech/eisti/dc/record/20232024-mba-cytech/register until July. For more information please contact cytech.international@cyu.fr

Shortlisted candidates will be contacted after sending applications and will be accepted after a face-to-face, telephone or Skype interview with a member of CY Tech Admissions Board. You can also visit our website for requirements, deadlines and a checklist of materials.

## Program cost

The tuition fees for one academic year of the MBA program are 11 500€.

80 Euros are required to access an admission interview.

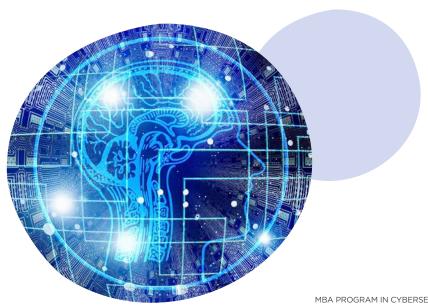
50% of the tuition fees must be settled for successful candidates so that our Admission Team can submit the study contract, an overview of your study program and administrative rules & regulations.

# Documents required for the application

- Official copies of university transcripts and degrees and/or official copies of professional experience;
- Copy of identity card/passport;
- A one-page CV;
- Your letter of interest (max. 2 pages). Your letter will help us to know about you, your interests, your values and goals. You will explain what encourages you to study an MBA program in Cybersecurity and Smart systems at CY Tech.
- A proof of English proficiency level CEFR (Common European Framework of Reference for Languages): B2, preferably proven via an official external exam test score:

TOEIC: 800	IBT TOEFL: 80	IELTS: 6.0
French Proficiency: no pre	requisite	
French as a Foreign Langu	age: Instruction included in CY Tech program	1.

· Some applicants might be exempt from providing us with a Proof of English language level if their mother tongue is English or if they have studied a fully-taught English program.



















#### **Director of International Relations**

Michel Guilmault michel.guilmault@cyu.fr

#### **Admission Officer**

Maria Ivanova maria.ivanova@cyu.fr

### International Office

cytech.international@cyu.fr +33 (0)1 34 25 10 03

#### **Head of Program**

Besma Zeddini besma.zeddini@cyu.fr

#### Administrative Head of CY Tech Postgraduate Programs

Sandra Rogeon sandra.rogeon@cyu.fr

#### CY Cergy Paris Université CY Tech

Site du Parc - 1st Floor - TG 109 Avenue du Parc CS 30221 95011 Cergy-Pontoise cedex France

cytech.cyu.fr

